



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/483,923 01/18/00 KLEE

M PHD-99.008

Corporate Patent Counsel
U.S. Philips Corporation
500 White Plains Road
Tarrytown NY 10591

MM92/0125

EXAMINER

DINKINS, A

ART UNIT

PAPER NUMBER

2831

DATE MAILED:
01/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/483,923

Applicant(s)

KLEE ET AL.

Examiner

Anthony Dinkins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ritchie et al. (4,453,199). Ritchie et al. disclose in Figure 8, a thin film capacitor comprising a carrier substrate (10), at least two interdigitated electrodes (12a, 14a), and at least one dielectric (13), characterized in that at least one interdigitated electrode (12a) is arranged below the dielectric (13) and at least one interdigitated electrode (14a) is arranged above the dielectric (13).

Regarding claim 2, the interdigitated electrode (14a) is positioned in a staggered arrangement with respect to the interdigitated electrode (12a) below the dielectric (13). Regarding claim 5, a barrier layer (11) is provided on the carrier substrate.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchie et al. . Ritchie et al. disclose applicant's claimed invention except for having the dielectric comprising a plurality of layers. It would have been obvious to one having ordinary skill in the art at the time

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the invention was made to have the dielectric comprise a plurality of layers, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchie et al. in view of Matsubara et al. (5,122,923) Ritchie et al. disclosed applicant's claimed invention as described above except for having the dielectric comprising a ferroelectric ceramic material. Matsubara et al. discloses in Figure 1, a thin film capacitor which includes a dielectric (4) that comprises ferroelectric ceramic material (col. 2, lines 61-66). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ritchie et al by having the dielectric (4) of Matsubara et al. which comprises ferroelectric ceramic material since Matsubara et al dielectric would provide a capacitor which has a high dielectric constant and good insulating characteristic by making the interdigitated electrode never subjected to surface roughening.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art disclose thin film capacitors having barrier layers.

Arcidiacono et al.	4,410,867
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Gabrail	3,596,370
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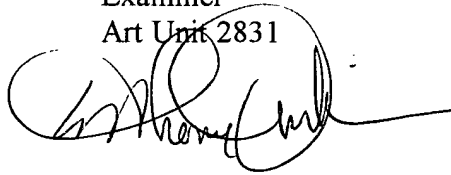
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Dinkins whose telephone number is (703) 308-0488. The examiner can normally be reached on M-F (6:30-3:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (703) 308-0640. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Anthony Dinkins
Examiner
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A handwritten signature in black ink, appearing to read 'Anthony Dinkins', is written over the printed name and title.

AD
January 23, 2001